What is Claimed:

1. A device for use with a programmable hearing prosthesis that sets the operational characteristics of said prosthesis, said device comprising:

neural network means for generating initial targets addressing at least one aspect of the hearing impairment and at least one listening environment;

means for entering audiological and other relevant data that characterize aspects of the impairment and of the user;

fuzzy logic means incorporating rules generating commands for modifying said initial targets based on user provided responses while listening to different sound environments;

neural network means for receiving said commands from said fuzzy logic means to modify said initial targets;

data processing means for using said modified targets to optimize all the hearing aid parameters of said prosthesis as a group;

means for downloading said operational parameters to the hearing prosthesis;

means for generating different sound stimuli for the in situ evaluation of the performance of the hearing prosthesis;

means for receiving the user responses to be used by the said fuzzy logic means;

means for the on-line retraining of the neural network after successful fittings;

means for the off-line retraining of the neural network from off site collected data on successful sittings; and

means for entering fuzzy processing rules to said fuzzy logic means.

2. A device as in claim 1 which includes a processor and a plurality of instructions wherein the neural means is implemented when the processor executes the instructions.

3. A programming device usable to program a hearing aid comprising:

a neural processing network for generating a plurality of output indicia indicative, at least in part, of parameters for the hearing aid to be programmed; and

a fuzzy logic processing system, coupled to the output indicia for modifying same to produce revised output indicia.

4. A device as in claim 3 which includes post-processing circuitry coupled between the network and the processing system.

5. A system for programming a selected hearing aid comprising:

input circuitry for receiving indicia of an individual's hearing characteristics;

a multi-level neural processing network with an input port that is coupled to the input circuitry, for processing the indicia and for generating, at an output port, at least one parameter value usable for programming the selected hearing aid wherein the value has been established by the network in response to both the input indicia and pre-established characteristics of the selected hearing aid.

6. A system as in claim 5 which includes a processor and a plurality of instructions wherein the network is implemented by the processor's execution of the plurality of instructions.

7. A system as in claim 6 wherein the processor is coupled to the input circuitry.

8. A system as in claim 6 which includes instructions for responding to the feedback of the individual in response to an initially established parameter and for modifying that parameter in response thereto.

9. A system as in claim 6 which includes a display unit, coupled to the processor and additional instructions for presenting the expected response characteristics of the hearing aid as a result of the generated parameter value.

10. A system as in claim 5 wherein the network incorporates a plurality of interconnected node elements wherein some of the elements are

associated with one layer and others of the elements are associated with a different layer.

11. A system as in claim 10 wherein at least some of the nodes are implemented by pluralities of instructions executed by at least one processor.

12. A system as in claim 10 which includes a plurality of processors wherein at least one node is implemented by one processor executing a first set of instructions and another node is implemented by another processor executing another set of instructions.

13. A system as in claim 6 which includes a fuzzy logic system, for receiving user feedback signals and for altering the at least one parameter in response thereto.

14. A system as in claim 5 which includes post-processing circuitry, coupled to the output port, for modifying network outputs.

15. A system as in claim 14 which includes feedback responsive circuitry, coupled to the post-processing circuitry, for modifying programming parameter values in response to use feedback.

16. A programmer for a hearing aid comprising:

a neural network for generating initial targets addressing at least one aspect of a user's hearing impairment and at least one listening environment;

circuitry, coupled to the network for entering audiological and other relevant data that characterize aspects of the impairment and of the user;

a fuzzy logic processor incorporating rule generating commands for modifying said initial targets based on user-provided responses while the user is listening to different sound environments;

circuitry and prestored instructions for receiving sid commands from said fuzzy logic processor to modify said initial targets; and

processing circuitry and associated instructions for using said modified targets to optimize at least some of the hearing aid parameters of said prosthesis as a group;

circuitry for downloading said operational parameters to the hearing prosthesis.

17. A programmer as in claim 16 which includes:

processing circuitry and associated instructions for using said modified targets to optimize at least some of the hearing aid parameters of said prosthesis as a group.

18. A programmer as in claim 17 which includes:

means for generating different sound stimuli for the in situ evaluation of the performance of the hearing prosthesis;

means for receiving the user responses to be used by the said fuzzy logic processor;

means for the on-line retraining of the neural network after successful fittings;

means for the off-line retraining of the neural network form data collected off-site after successful fittings;. and

means for entering fuzzy processing rules to said fuzzy logic processor.